

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of generating a mixed media stream from input media streams of a first type having payload data elements and related identifiers, respectively, comprising the step:

aligning the input media streams of the first type according to a pre-specified relation between identifiers in the input media streams of the first type before generating the mixed media stream, wherein

the pre-specified relation between identifiers in the input media streams of the first type is matched to a relation between identifiers in further input media streams of a second type used during generation of a further mixed media stream from the input media streams of the second type, wherein the matching of relations between identifiers in the input media streams of the first type and further input media streams of the second type is achieved by

identifying an intersection between the input media streams of the first type and the further input media streams of the second type;

determining a relation between identifiers in the further input media streams of the second type for those further input media streams which are comprised in the intersection;

aligning the input media streams of the first type which are comprised in the intersection according to the relation of identifiers in the

further input media streams of the second type, wherein the input media streams of the first type at a point in time are described by

$$I_s = [(q_1, n_1), (q_2, n_2), \dots, (q_s, n_s)]$$

with $\{q_1, q_2, \dots, q_m\}$ as a set of input media streams and $\{n_1, n_2, \dots, n_s\}$ as a set of identifiers in the input media streams at a point in time, the further input media streams of the second type at a point in time are described by $I_{s'} = [(s_1, i_1), (s_2, i_2), \dots, (s_m, i_m)]$ with $\{s_1, s_2, \dots, s_m\}$ as a set of further input media streams and $\{i_1, i_2, \dots, i_m\}$ as a set of identifiers in the further input media streams of the second type at the point in time, the intersection between the input media streams of the first type and the further input media streams of the second type is $S_A = \{s_1, s_2, \dots, s_m\} \cap \{q_1, q_2, \dots, q_s\}$, and the relation between identifiers in the further input media streams of the second type for those further input media streams of the second type which are comprised in the intersection is determined by

$$I_{s'} = \bigcup_{j \in \{1, \dots, s\}} \{(q_j, n_j) \mid q_j \in S_A\}.$$

2. -3. (Canceled)

4. (Currently Amended) The method according to claim 1 [[3]], further comprising the step of re-ordering the sequence of input media streams of the first type in the intersection according to the sequence of further input media streams of the second type in the intersection.

5. (Currently Amended) The method according to claim 1 [[4]], wherein the re-ordering of the sequence of input media streams of the first type is achieved according to a permutation vector defined by $\forall_{i \in [1, \dots, |I_s'|]} \{p(i) = j \in [1, \dots, |I_s'|] | s_i = q_j\}$.

6. (Currently amended) The method according to claim 1 [[2]], wherein the alignment of input media streams of the first type in the intersection is achieved by determining a relative time delay for each input media stream of the first type such that relations between different identifiers in the input media streams of the first type after time delay correspond to relations between identifiers in the further input media streams of the second type, and shifting each input media stream of the first type in time according to the related time delay.

7. (Previously Presented) The method according to claim 6, wherein the time delay for each input media stream of the first type is determined according to

$$\delta_i = i_i - n_{p(i)}, i = 1, \dots, |I_s'|$$

$$\delta_i' = \delta_i - \max_{j \in [1, \dots, |I_s'|]} \delta_j, i = 1, \dots, |I_s'|$$

and each input media stream of the first type is shifted in time according to

$$q_{s_i}'(t) = q_{s_i}(t + \delta_i'), i = 1, \dots, |I_s'|.$$

8. (Previously Presented) The method according to claim 1, wherein an exchange of information regarding the pre-specified relation between identifiers is achieved through a signal transfer or a shared-memory mechanism.

9. (Currently Amended) An apparatus for generating a mixed media stream from input media streams of a first type having payload data elements and related identifiers of a second type, comprising:

an identifier interface unit for exchange of a pre-specified relation between identifiers in different input media streams, and

an alignment unit adapted to align the input media streams of the first type according to the pre-specified relation between identifiers in different input media streams of a second type before generating the mixed media stream, wherein the pre-specified relation is matched to a relation between identifiers in further input media streams of the second type used during generation of a further mixed media stream and that the matching of relations between identifiers in the input media streams of the first type and in the further input media streams of the second type is achieved by

a pre-processing unit adapted to identify an intersection between the input media streams of the first type and the further input media streams of the second type,

a calculation unit adapted to determine a relation between identifiers in the further input media streams of the second type for those

further input media streams of the second type which are comprised in the intersection, and

an aligning unit adapted to align the input media streams of the first type which are comprised in the intersection according to the relation of identifiers in the further input media streams of the second type, wherein the input media streams of the first type at a point in time are described by $I_s = [(q_1, n_1), (q_2, n_2), \dots, (q_s, n_s)]$ with $\{q_1, q_2, \dots, q_s\}$ as the set of input media streams of the first type and $\{n_1, n_2, \dots, n_s\}$ as a set of identifiers in the input media streams of the first type at a point in time, the further input media streams of the second type at a point in time are described by

$$I_M = [(s_1, i_1), (s_2, i_2), \dots, (s_m, i_m)] \text{ with } \{s_1, s_2, \dots, s_m\}$$

as a set of further input media streams of the second type and $\{i_1, i_2, \dots, i_m\}$ as a set of identifiers in the further input media streams of the second type at the point in time,

the pre-processing unit is adapted to determine the intersection between the input media streams of the first type and the further input media streams of the second type according to

$$S_A = \{s_1, s_2, \dots, s_m\} \cap \{q_1, q_2, \dots, q_s\}, \text{ and}$$

the pre-processing unit is further adapted to determine the relation between identifiers in the further input media streams of the second type for those further input media streams of the first type which are comprised in the intersection on the basis of $I_s' = \bigcup_{j \in \{1, \dots, s\}} \{(q_j, n_j) | q_j \in S_A\}$.

10. - 11. (Canceled)

12. (Currently Amended) The apparatus according to claim 9 [[10]] wherein the pre-processing unit is further adapted to re-order the sequence of input media streams of the first type in the intersection according to the sequence of further input media streams of the second type in the intersection.

13. (Previously Presented) The apparatus according to claim 12, wherein the pre-processing unit is adapted to re-order the sequence of input media streams of the first type according to a permutation vector defined by

$$\forall_{i \in \{1, \dots, I_s'\}} \{p(i) = j \in [1, \dots, I_s] | s_i = q_j\}.$$

14. (Previously Presented) The apparatus according to claim 9, wherein the alignment of input media streams of the first type in the intersection is achieved by

the calculation unit adapted to determine a relative time delay for each input media stream of the first type such that relations between different identifiers in the input media streams of the first type, after time delay, correspond to relations between identifiers in the further input media streams of the second type, and

a shifting unit adapted to shift each input media stream of the first type in time according to the related time delay.

15. (Previously Presented) The apparatus according to claim 14, the calculation unit is adapted to calculate the time delay for each input media stream of the first type according to

$$\delta_i = i_i - n_{p(i)}, i = 1, \dots, |I_s|$$

$$\delta_i' = \delta_i - \max_{j \in \{1, \dots, |I_s|\}} \delta_j, i = 1, \dots, |I_s|$$

and the shifting unit is adapted to shift each input media stream of the first type in time according to

$$q_s'(t) = q_s(t + \delta_i'), i = 1, \dots, |I_s|$$

16. (Canceled)